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EXAMINER	
COLEMAN, RYAN L	

ART UNIT	PAPER NUMBER
1714	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/580,579	HEISSLER ET AL.	
	Examiner	Art Unit	
	RYAN COLEMAN	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 September 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-20 and 29-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-20 and 29-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 17, 2010 has been entered. Claims 1-10 and 21-28 have been canceled. Claims 11-20 and 29-37 are pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 11-20 and 30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. With regard to claims 11-20, independent claims 11 and 16 specify controlling the heater *solely as a function of the detected humidity*. Negative limitations which do not appear in the specification as originally filed, and which introduce new concepts violate the description requirement of 35 USC 112,

first paragraph, *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983). With regard to claim 30, applicant's specification as originally filed does not support the concept of there being a "non-electric controller to control the display as a function of humidity determined by the humidity sensor"

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 12 specifies that the dishwasher includes one of an electronic means for controlling and a non-electronic means for controlling, and this means for language invokes 35 USC § 112, sixth paragraph. However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function. From page 2, line 30 to page 3, line 3, applicant discusses how the dishwasher's heater can be controlled electronically or non-electronically. With regard to controlling the heater electronically, applicant mentions having an electronic controller, but applicant does not discuss an algorithm by which the electronic controller could control the heater on the basis of humidity data. Merely referencing to a general purpose computer with appropriate programming without providing any detailed explanation of the appropriate programming does not provide adequate disclosure for an electronic means for controlling (See *Aristocrat Technologies, Inc. v. International Game Technology*, 521 F.3d 1328, 1333, 86 USPQ2d 1235, 1239-40 (Fed. Cir. 2008). With regard to controlling the heater non-electronically, applicant does not discuss

structure, material, or acts by which a user could non-electronically control the dishwasher's heater.

6. Applicant is required to:

a. Amend the claim so that the claim limitations will no longer be means (or step) plus function limitations under 35 U.S.C. 112, sixth paragraph; or

b. Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function without introducing any new matter (35 U.S.C. 132(a)).

7. If applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function, applicant is required to clarify the record by either:

c. Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed function and clearly links or associates the structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or

d. Stating on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP 2181 and 608.01(o).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 11-14 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent No. 5,331,984 to Isagawa in view of JP 01-141642 to Asai.

12. With regard to claims 11 and 14, Isagawa teaches a dishwasher having a chamber (item 14 in Figure 2; reads on *washing container*) to retain dishes therein to be washed by the dishwasher (Col. 2, 12-25). Isagawa teaches that the dishwasher comprises a system for drying dishes wherein the system includes a heater (item 44 in Figure 2) for heating air in dishwasher during a drying operation (Col. 2, 34-38; Col. 4, 24-27). Isagawa teaches that, during the drying operation, the heated air functions to evaporate water from the dishes, and Isagawa teaches that the drying operation is performed for a predetermined amount of time (Col. 4, 24-36).

13. Isagawa does not teach that the dishwasher comprises a humidity sensor.

14. Asai teaches that when drying tableware within a chamber with air heated by a heater (item 4 in Drawing 1), it is advantageous to have a humidity sensor (item 9 in Drawing 1) within the chamber such that the humidity sensor can be used to determine when to end the drying process (Abstract). Asai teaches that once the relative humidity reaches a particular value during the drying process, the tableware can be considered dried and the drying process can be terminated at the optimum time by turning off the heater (Abstract).

15. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Isagawa by adding a humidity sensor into the dishwasher's chamber such that the humidity sensor could sense the humidity in the chamber during the drying process and have the dishwasher's heater turned off once the humidity reaches a particular value representing the end of the drying operation. The motivation for performing the modification was provided by Asai, who taught that

such a technique of using a humidity sensor to determine the end of the drying procedure and when to turn off a drying heater advantageously allows the drying process to be terminated at the optimum time. Since this combination of Isagawa in view of Asai only teaches controlling the heater as a function of the sensed humidity, the combination of Isagawa in view of Asai is considered to teach that the dishwasher heating system is *configured and set to control the heater solely as a function of the detected humidity.*

16. With regard to claim 12, the combination of Isagawa in view of Asai teaches that the dishwasher has an electronic controller (item 74 in Isagawa's Figure 2) that has memory and the ability to compare sensed data (Col. 2, line 65 to Col. 3, line 9). The combination of Isagawa in view of Asai does not explicitly teach that the electronic controller is what controls the heater as a function of the sensed humidity. However, the limitations of claim 12 are not considered to structurally distinguish the claimed invention from the combination of Isagawa in view of Asai because the controller in the combination of Isagawa in view of Asai can be programmed to perform the claimed functionality. The limitations of claim 12 specifying that the electronic controller controls the drying as a function of the sensed humidity specify intended use of the apparatus, and therefore, those limitations are not given patentable weight (see MPEP 2114). It is well known that a controller can have different control scenarios by way of programming, and the dishwasher structure of Isagawa in view of Asai is considered to meet the structural limitations of claim 12.

17. With regard to claim 13, since the combination of Isagawa in view of Asai teaches turning off the heater once the sensed relative humidity reaches a particular value, the turning off of the heater and humidity determined by the humidity sensor are considered to have a non-independent relationship.

18. With regard to claims 16, 18, and 20, Isagawa teaches a method of cleaning and drying dishes in a dishwasher wherein the dishes are subjected to a rinse process and subsequently subjected to a drying process in which air in the dishwasher is heated by a heater (item 44 in Figure 2; Col. 2, 12-42; Col. 3, 60-62; Col. 4, 24-27). Isagawa teaches that, during the drying process, the heated air functions to evaporate water from the dishes, and Isagawa teaches that the drying operation is performed for a predetermined amount of time (Col. 4, 24-36).

19. Isagawa does not teach detecting the humidity of air in the dishwasher.

20. Asai teaches that when drying tableware within a chamber with air heated by a heater (item 4 in Drawing 1), it is advantageous to have a humidity sensor (item 9 in Drawing 1) within the chamber such that the humidity sensor can be used to determine when to end the drying process (Abstract). Asai teaches that once the relative humidity reaches a particular value during the drying process, the tableware can be considered dried and the drying process can be terminated at the optimum time by turning off the heater (Abstract).

21. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Isagawa by adding a humidity sensor into the dishwasher's chamber such that the humidity sensor senses the humidity in the

chamber during the drying process and can have the dishwasher's heater turned off once the humidity reaches a particular value representing the end of the drying operation. The motivation for performing the modification was provided by Asai, who taught that such a technique of using a humidity sensor to determine the end of the drying procedure and when to turn off a drying heater advantageously allows the drying process to be terminated at the optimum time. Since this combination of Isagawa in view of Asai only teaches controlling the heater as a function of the sensed humidity, the combination of Isagawa in view of Asai is considered to teach that the dishwasher heating is controlled *solely as a function of the detected humidity*.

22. With regard to claims 17 and 19, the combination of Isagawa in view of Asai developed in the rejection of claim 16 teaches ending the drying process by turning off the heater when the sensed relative humidity reaches a particular value representing the end of the drying operation.

23. The combination of Isagawa in view of Asai does not teach that an electronic controller is what ends the drying process by turning off the heater when the sensed relative humidity reaches the particular value.

24. Isagawa teaches that the dishwasher has a controller (item 74 in Figure 2) with memory and the ability to compare values (Col. 2, line 62 to Col. 3, line 9; claim 1). Isagawa teaches that the controller advantageously allows the comparison of sensed values and the control of the dishwasher's heater to be electronically automated (Col. 2, line 62 to Col. 3, line 9; claim 1).

25. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Isagawa in view of Asai by using the dishwasher's controller (item 74 in Isagawa's Figure 2) to compare the sensed relative humidity and end the drying process by turning off the heater when the humidity reaches a particular value representing the end of the drying operation. One of ordinary skill in the art could have used known engineering techniques to perform the modification, and the results would have been predictable to one of ordinary skill in the art. The motivation for performing the modification was provided by Isagawa, who taught that the dishwasher's controller can advantageously be used to compare sensed values and control the heater in an automated fashion.

26. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent No. 5,331,984 to Isagawa in view of JP 01-141642 to Asai as applied to claim 11 above, and further in view of JP 10-258014 by Nakajima.

27. With regard to claim 15, the combination of Isagawa in view of Asai teaches that the dishwasher's humid air is sucked into a circulation duct (item 50 in Isagawa's Figure 2) by way of an outlet (item 46 in Isagawa's Figure 2) during the drying process (Col. 4, 24-32 of Isagawa).

28. The combination of Isagawa in view of Asai does not teach that the humidity sensor is arranged in an upper area of the dishwasher.

29. Nakajima teaches a dishwasher wherein during a drying process, humid air is sucked into a duct (item 5 in Figure 1), and Nakajima teaches that a humidity sensor is

placed within the duct in an upper part of the dishwasher in order to advantageously detect the humidity of the dishwasher air during the drying process (Abstract).

30. It would have been obvious to one of ordinary skill in the art at the time of the inventions to modify the apparatus of Isagawa in view of Asai by arranging the humidity sensor in the duct in the upper part of the dishwasher such that the humidity sensor can sense the humidity of the drying process's humid air. This modification represents a simple rearrangement of parts (see MPEP 2144.04, *Rearrangement of Parts*), and the motivation for performing the modification was provided by Nakajima, who taught that a humidity sensor can be advantageously arranged in an air duct in the upper part of a dishwasher in order to sense the humidity of the dishwasher's air during a drying process.

31. Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent No. 5,331,984 to Isagawa in view of JP 01-141642 to Asai as applied to claim 11 above, and further in view of JP 2515420 by Okamoto et al. (hereafter referred to as "Okamoto").

32. With regard to claims 29 and 31, the combination of Isagawa in view of Asai does not explicitly teach that the heating system can be switched off by an operator in a manner independent of the sensed humidity.

33. Okamoto teaches a dishwasher comprising a washing container in which dishes are washed and a heater (item 17 in Figure 1) for heating air during a drying process (Pages 4 and 5). Okamoto teaches having a halt switch (item 35 in Figure 1) with which the operator can halt a process of the dishwashing machine (Page 5).

34. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Isagawa in view of Asai by adding a halt switch to the dishwasher such that the operator could selectively halt the drying process. The motivation for performing the modification was provided by Okamoto, who taught having such a switch in order to halt a dishwashing process, and it would be desirable for the operator to be able to halt the drying process because the operator would have the option of halting the drying process if they suspected a system malfunction or judged the drying process to be finished.

35. The combination of Isagawa in view of Asai in view of Okamoto teaches that the dishwasher has a display (item 73 in Isagawa's Figure 2) connected to the dishwasher's electronic controller (item 74 in Isagawa's Figure 2; see Col. 2, line 60 to Col. 3, line 9 of Isagawa), but the combination of Isagawa in view of Asai in view of Okamoto does not teach that the humidity sensed by the humidity sensor is displayed on the display. However, the limitation specifying that the sensed humidity is displayed on the display represents intended use of the apparatus, and therefore, the limitation is not given patentable weight (see MPEP 2114). It is well known that a controller and display can have different control/display scenarios by way of programming, and the dishwasher structure of Isagawa in view of Asai in view of Okamoto is considered to meet the structural limitations of claim 29.

36. With regard to claim 30, the combination of Isagawa in view of Asai in view of Okamoto teaches that the controller connected to the display is an electronic controller (Col. 2, line 60 to Col. 3, line 9 of Isagawa). The limitation of claim 30 specifying that

the controller displays the humidity determined by the humidity sensor on the display specifies intended use of the apparatus, and therefore, the limitation is not given patentable weight (see MPEP 2114). It is well known that a controller and display can have different control/display scenarios by way of programming, and the dishwasher structure of Isagawa in view of Asai in view of Okamoto is considered to meet the structural limitations of claim 30.

37. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent No. 5,331,984 to Isagawa in view of JP 01-141642 to Asai in view of JP 2515420 by Okamoto as applied to claim 29 above, and further in view of JP 10-258014 by Nakajima.

38. With regard to claim 32, the combination of Isagawa in view of Asai in view of Okamoto teaches that the dishwasher's humid air is sucked into a circulation duct (item 50 in Isagawa's Figure 2) by way of an outlet (item 46 in Isagawa's Figure 2) during the drying process (Col. 4, 24-32 of Isagawa).

39. The combination of Isagawa in view of Asai in view of Okamoto does not teach that the humidity sensor is arranged in an upper area of the dishwasher.

40. Nakajima teaches a dishwasher wherein during a drying process, humid air is sucked into a duct (item 5 in Figure 1), and Nakajima teaches that a humidity sensor is placed within the duct in an upper part of the dishwasher in order to advantageously detect the humidity of the dishwasher air during the drying process (Abstract).

41. It would have been obvious to one of ordinary skill in the art at the time of the inventions to modify the apparatus of Isagawa in view of Asai in view of Okamoto by

arranging the humidity sensor in the duct in the upper part of the dishwasher such that the humidity sensor can sense the humidity of the drying process's humid air. This modification represents a simple rearrangement of parts (see MPEP 2144.04, *Rearrangement of Parts*), and the motivation for performing the modification was provided by Nakajima, who taught that a humidity sensor can be advantageously arranged in an air duct in the upper part of a dishwasher in order to sense the humidity of the dishwasher's air during a drying process.

42. Claims 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent No. 5,331,984 to Isagawa in view of JP 01-141642 to Asai as applied to claim 16 above, and further in view of JP 2515420 by Okamoto.

43. With regard to claim 33, the combination of Isagawa in view of Asai does not explicitly teach that the heating system can be switched off by an operator in a manner independent of the sensed humidity.

44. Okamoto teaches a dishwasher comprising a washing container in which dishes are washed and a heater (item 17 in Figure 1) for heating air during a drying process (Pages 4 and 5). Okamoto teaches having a halt switch (item 35 in Figure 1) with which the operator can halt a process of the dishwashing machine (Page 5).

45. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Isagawa in view of Asai by adding a halt switch to the dishwasher such that the operator could selectively halt the drying process. The motivation for performing the modification was provided by Okamoto, who taught having such a switch in order to halt a dishwashing process, and it would be desirable for the

operator to be able to halt the drying process because the operator would have the option of halting the drying process if they suspected a system malfunction or judged the drying process to be finished.

46. The combination of Isagawa in view of Asai in view of Okamoto teaches that the dishwasher has a display (item 73 in Isagawa's Figure 2) connected to the dishwasher's electronic controller (item 74 in Isagawa's Figure 2; see Col. 2, line 60 to Col. 3, line 9 of Isagawa), but the combination of Isagawa in view of Asai in view of Okamoto does not teach that the humidity sensed by the humidity sensor is displayed on the display. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Isagawa in view of Asai in view of Okamoto by displaying the sensed humidity data on the dishwasher's display. Isagawa teaches using the display in order to provide dishwasher information to the user, and the motivation for performing the modification would be to provide the user with dishwasher humidity information such that the user could judge whether the drying process is finished or if the dishwasher is malfunctioning.

47. With regard to claims 34-37, the combination of Isagawa in view of Asai in view of Okamoto teaches controlling the drying process such that the heater is turned off when the humidity reaches a particular value, and since the controller must inherently be either an electronic controller or a non-electronic controller, the combination of Isagawa in view of Asai in view Okamoto is considered to teach that the controlling is done by *a non-electronic or an electronic controller*.

Response to Arguments

48. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

49. In applicant's arguments filed September 2, 2010, applicant argues agains the 35 U.S.C., first paragraph, new matter rejections for claims 11-20 that were presented in the Final Rejection. Applicant argues that support for the limitations specifying that the heater is controlled "solely" as a function of the detected humidity can be found in the following passage: "...the drying process can be ended depending on the humidity determined by the humdity sensor. That is, the drying process is only carried out until the desired degree of drying or a sufficient drying of the objects to be washed has been reached." Although this passage does support the concept of using the humidity determined by the humidity sensor to control when the drying process is terminated, the passage does not support the negative limitations specifying that the dishwasher heater is controlled "solely" as a function of detected humidity.

Conclusion

50. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN COLEMAN whose telephone number is (571)270-7376. The examiner can normally be reached on Monday-Friday, 9-5.

51. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Kornakov can be reached on (571)272-1303. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

52. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/RLC/
Ryan L. Coleman
Patent Examiner, Art Unit 1714
May 4, 2011
/Michael Kornakov/
Supervisory Patent Examiner, Art Unit 1714